

10/529319

## SEQUENCE LISTING

JC17 Rec'd PCT/PTO 25 MAR 2005

<110> DRANCOURT, Michel  
RAOULT, Didier

<120> Molecular identification of bacteria of genus Streptococcus

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<141> 2004-11-04

<150> FR 02/13792  
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<211> 3096

<212> DNA

<213> Enterococcus faecalis

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<220>  
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 <222> (6)..(6)  
 <223> n represents a, t, c or g or i

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20

<210> 7  
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<220>  
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 <223> n represents i

<220>  
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 <223> n represents a, t, c or g or i

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23

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<210> 9  
<211> 725  
<212> DNA  
<213> Streptococcus sanguinis

<400> 9  
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ggtca

725

<210> 10  
<211> 728  
<212> DNA  
<213> Streptococcus salivarius

<400> 10  
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caggtcca 728

<210> 11  
<211> 725  
<212> DNA  
<213> Streptococcus pyogenes

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725

<210> 12  
 <211> 724  
 <212> DNA  
 <213> Streptococcus pneumoniae

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<210> 13  
 <211> 694  
 <212> DNA  
 <213> Streptococcus oralis

<400> 13  
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<210> 14  
 <211> 728  
 <212> DNA  
 <213> Streptococcus mutans

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<210> 15  
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 <212> DNA  
 <213> Streptococcus mitis

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 aaggtaaggc atatcttcta caggaacgat acgagagaca acccctttat ttccgtgacg 360  
 tccggccatc ttatctccga ccttgatctt acgtttttga gcgatgtaga cgcgaccag 420  
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 aaccacacca tcagctccgt gtggtacacg aagagaagtg tcacgtactt cacgagattt 540  
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 tgttacttta cctacaagga tatccccttc tttaacctca gcaccgatac ggataatacc 660  
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 ttcaggtcca 730

<210> 16  
 <211> 697  
 <212> DNA  
 <213> Streptococcus equinus

<400> 16  
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 tatccgtatc ggtgctgaag ttaaagaagg tgacatcctt gtaggtaaag taacacctaa 120  
 aggtgaaaaa gacctttctg ctgaagagcg ctttcttcac gcaatcttcg gtgataaatc 180  
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 cgtaaaaatc ttacacgtg caaacggtga tgaattacaa tcaggtgtta acatgctcgt 300  
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 cggtaacaaa ggggttggtt ctgctgttgt tccagttgaa gacatgcctt atcttccaga 420  
 cggaactcca gtcgatatca tggtgaaccc acttgggggtg ccatctcgta tgaacatcgg 480  
 acaagttatg gagcttcacc ttggtatggc tgctcgtaac cttggtattc acattgcaac 540  
 accagtcttt gatggggcaa cttctgaaga ctttgggat acagttaacg aagctggtat 600  
 ggctagcgac gctaagacag ttctttacga tggacgtact ggtgaaccat ttgataaccg 660  
 tgtgtcagtt ggtgtcatgt acatgattaa acttcac 697

<210> 17  
 <211> 731  
 <212> DNA  
 <213> Streptococcus constellatus

<400> 17  
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 tgcttcacga acagtatccc aaaggtcatc tgagcttgct ccgtcaaata ctggcggtgc 180  
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 aagataaggc atatcctcaa ctggaacgat acgggaaaca acccctttat ttccgtggcg 360  
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 catgttgaca ccagattgca attcatcacc gttcgcacga gtaaagattt tcacatcacg 480  
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 cgttacttta ccgacaagaa tgctgccctc tttcacctca gcaccaatgc ggataattcc 660  
 catttcgtca aggtctctta gcgcatcttc cccaacgttt ggaatttcgc gcgtaatttc 720  
 ttcaggtcca a 731



<210> 18  
 <211> 697  
 <212> DNA  
 <213> Streptococcus anginosus

<400> 18  
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 acgtgtttac atcgctcaaa aacggaaaat ccgtgttggg gataagatgg ctggacgtca 360  
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 tcaagttatg gagcttcacc tcggtatggc tgctcgcaac cttggcattc acattgcaac 540  
 accagtatth gacgggggcta gctcagatga tctttgggaa accgttcgtg aagctggcat 600  
 ggatagcgat gctaagacaa tcctttatga tggccgtact ggtgagccat ttgataatcg 660  
 tgtatccgtt ggtgtcatgt acatgatcaa actccac 697

<210> 19  
 <211> 728  
 <212> DNA  
 <213> Streptococcus dysgalactiae

<400> 19  
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 cttcacgaac agtgtcccaa aggtcttctg atgaagcccc gtcaaagaca ggtgttgcaa 180  
 tgtgaatacc aagattacga gcagccatac caagggtgaag ttccataacc tgaccaatgt 240  
 tcatccgtga tggcacccca agaggggttca acatgatgtc aactgggtgt ccatctggaa 300  
 ggtatggcat gtcttcaact ggtacaatac gtgaaacgac acccttgtht ccgtgacgac 360  
 cagccattth atctccgact ttgatcttac gtttttgagc aatgtaaaca cgcacaagca 420  
 tattaacacc tgattgcaat tcatcgccgt tagcgcgtgt aaagattthc acatcacgaa 480  
 cgataccatc accaccgtga ggtacacgaa gggacgtatc acgaacttca cgtgatttat 540  
 ctccaaagat ggcattgcaag agacgtctt cagcagaaag gtctthtttca cthtttaggtg 600  
 tgactthacc tactaagatg tcgccttctt taacctcagc accgatacgg ataattccca 660  
 thtctgcaag gtctthtgagc gcttcttcac caacgtthtg aatttcgcgg gtgattthct 720  
 caggtcaa 728

<210> 20  
 <211> 728

<212> DNA

<213> Streptococcus bovis

<400> 20

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cttcacgaac agtatcccaa aggtcttctg aagttgcccc gtcaaagact ggagttgcaa	180
tgtgaatacc gaggttacga gctgccatac caaggtgaag ttccataact tgtccgatat	240
tcatacgaga tggcacccca agaggggttca acatgatatc aactggagtt ccgtctggaa	300
gatatggcat gtcttcaaca ggaacgatac gagaacaac ccctttgttt ccgtgacgac	360
cggccatttt atctccgact ttgattttac gtttttgtgc aatgtaaaca cgaacgagca	420
tgttgacacc tgattgcaat tcataccgt tagcacgtgt gaagatttta acatcacgaa	480
caacacgctc tccaccgtgt ggcacacgaa gtgatgtatc acgtacttca cgagatttat	540
caccgaagat tgcgtgaaga aggcgttctt cagcagaaag gtctttttca cctttaggtg	600
ttactttacc tacaaggata tcaccttctt taacttcagc accgatacgg ataataccca	660
tttcgtcaag gtctttaaga gcttcttcac caacgttttg aatttcgcga gtgatttctt	720
caggtcaa	728

<210> 21

<211> 728

<212> DNA

<213> Streptococcus acidominimus

<400> 21

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gcctctttta cagttgacca gagatcctct gagctcgac catcgaaaac cgggtgtgcy	180
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agatatggca tgtcttcaac tggtaacaata cgagaaacga cacccttggt accgtgacga	360
ccggccatct tatctccgac cttaatcttg cgtttttgag cgatatacac acgtaccagc	420
atattaacac cagactgtag ctcatcacca ttagcacgcy taaagatttt cacatcacga	480
acaacaccat ctgcaccgtg tggcacacgt agagaggtat cacgtacttc acgtgatttg	540
tcaccgaaga tagcatgcaa gagacgctcc tcagcagaaa gatctttttc accttttggt	600
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tcaggtca	728

<210> 22

<211> 733

<212> DNA

<213> Streptococcus agalactiae

<400> 22

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acctgcttct tgaacagttt cccaaaggtc ttctgaagaa gcccacatcaa agactggcgt	180
tgcaatatga atacctaaat tacgagcagc catabctaaa tgaagctcca taacttgtcc	240
gatattcata cgtgatggca cccaagtggt gttcaacatg atatcaactg gcgttccatc	300
tggttaagtaa ggcatatctt caacaggaac aatacgtgag acgacacctt tgtttccgtg	360
acgaccggcc atcttatcac cgactttgat ttacgtttt tgagcgatat aaacgcggac	420
aagcatatta acacctgatt gcaattcatc accatttgca cgagtaaaga ttttaacgtc	480
acgaactact ccatcgccac cgtgaggtag acgtagtga gtatcacgaa cttcacgtga	540
tttatcacca aaaatggcat gcaagagacg ttcttcagca gataagtcct tttcacctt	600
aggtgttacc ttaccaacaa gaatgtcacc ttcttttacc tcagcaccaa tgcggataat	660
tcccatttca tcgagatcac gtagtgaatc ttcaccaaca ttttggattt cagagtaat	720
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<210> 23

<211> 714

<212> DNA

<213> Streptococcus difficilis

<400> 23

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tcgaatgggt caccagtagt accatcataa agaacagtct tagcatctga atccatacct	120
gcttcttgaa cagtttccca aaggtcttct gaagaagccc catcaaagac tggcgttgca	180
atatgaatac ctaaattacg agcagccata cctaaatgaa gctccataac ttgtccgata	240
ttcatagctg atggcacccc aagtgggttc aacatgatat caactggcgt tccatctggt	300
aaataaggca tatcttcaac aggaacaata cgtgagacga cacctttggt tccgtgacga	360
ccggccatct taccaccgac tttgatttta cgtttttgag cgatataaac gcggacaagc	420
atattaacac ctgattgcaa ttcattacca ttgacagag taaagatttt aacgtcacga	480
actactccat cgccaccgtg aggtacacgt agtgaagtat cacgaacttc acgtgattta	540
tcaccaaaaa tggcatgcaa gagacgttct tcagcagata agtccttttc acccttaggc	600
gttaccttac caacaagaat gtcaccttct ttacctcag caccaatgcy gataattccc	660
atttcacga gatcacgtag tgaatcttca ccaacatttg gaatttcacg agta	714

<210> 24

<211> 728

<212> DNA

<213> Streptococcus intermedius

<400> 24  
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 tgtggatacc aagggttgca gcagccatac cgaggtgcaa ttccataact tgtccgatat 240  
 tcatacgtga cggcacccca agaggattca acatgatata aactgggtgtc ccgtctggaa 300  
 gatacggcat atcctcaact ggaacaatgc gggaaacaac ccctttgttt ccgtggcgctc 360  
 cggccatctt atctccaacg cggattttcc gtttttgagc gatataaaca cgtaccaaca 420  
 tgttgacacc ggattgcaat tcatcacctg tcgcacgagt aaagattttt acatcacgga 480  
 caacacctgc accaccgtgt ggtacacgaa gggaggtatc acgcacttca cgagacttat 540  
 caccaaaaat tgcatagaac aggcgttctt cagcggataa atctttttca cctttcggcg 600  
 ttactttacc gacaagaatg tcgccttctt ttacctcagc accaatgcgg ataattccca 660  
 tctcgtcaag gtctctcaaa gcacttccc cgacgtttgg aatttcgcgc gtgatttctt 720  
 caggtcca 728

<210> 25  
 <211> 728  
 <212> DNA  
 <213> Streptotoccus equi

<400> 25  
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 cttcacgaac agtttcccaa aggtcctcag acgtagctcc gtcaaagacc ggtgttgca 180  
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 gatatggcat atcctcaacc ggtacaatac gtgagacgac acccttggtta ccatgacgcc 360  
 cggccatttt atctccgacc ttgattttac gcttttgagc aatgtaaaca cgcaccagca 420  
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 caatcccgtc accaccatga ggaacacgta acgaggtatc acgaacctca cgtgatttat 540  
 caccaaagat agcatgcagg agacgttctt cagcagaaag gtctttttca cccttaggag 600  
 ttaccttacc aacaagaata tcgccttctt tgacctctgc accgatacgg ataataccca 660  
 tttcatcaag gtccttgagg gcttcttcac caacgtttgg caattcacgt gtgatttctt 720  
 caggtcca 728

<210> 26  
 <211> 697  
 <212> DNA  
 <213> Enterococcus gallinarum

<400> 26  
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catccgcatt ggtgcggaag tcaaagatgg cgatctgttg gttggtaaag taacgcctaa 120  
aggggtaacg gaactatctg cagaagaacg cttgcttcat gcaatctttg gtgaaaaagc 180  
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cggaataaaa ggggtcgttt ctgcgattat gccagaagaa gacatgcctt tcttaccaga 420  
cggtacacca gttgatata tgttgaaccc attaggggtg ccttcacgga tgaacattgg 480  
acaagtattg gaattacact taggaatggc tgcccgcga ttaggaatcc acgtggctac 540  
accagtcttt gatggtgcca gcgatgaaga tgtctgggca acagttgcag aagccggcat 600  
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aatctccgta ggtgtcatgt atatgatcaa attggcc 697

<210> 27  
<211> 727  
<212> DNA  
<213> *Enterococcus casseliflavus*

<400> 27  
tgtcatcaac catgtgggcc aatttgatca tgtacatgac accaacggag atgcggccat 60  
caaatggttc gccggtacgt ccgtcgtaaa gcaactgtttt ggcatcgctg gccattcctg 120  
cttcagcaac cgttgcccaa acatcttcat cgctggctcc atcaaagact ggtgttgcca 180  
cgtgaatgcc taattgacgc gcagccattc ctaagtgtaa ctctaatact tgtccaatgt 240  
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cggccatttt atccccttca tggattttcc gtttttgaac gatataaacg cgaaccagca 420  
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aggtcca 727

<210> 28  
<211> 721  
<212> DNA  
<213> *Enterococcus saccharolyticus*

<400> 28

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cttcgcgaac tgtttcccat acgtcatcat ctgatgcacc atcaaatact ggtgtagcta	180
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caccgaagat tgcgtgcaat agacgttctt ctgcagataa ttcggttacc cctttaggag	600
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tttcgtctaa gtcttttaat gcgtcttccc caacgttagg aatttcgcgt gtattcttca	720
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<210> 29  
 <211> 727  
 <212> DNA  
 <213> Enterococcus faecium

<400> 29	
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<210> 30  
 <211> 725  
 <212> DNA  
 <213> Enterococcus faecalis

<400> 30

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agaatggcat atcttcttcc ggcataatac gggaaacaac ccctttatctt ccgtgacgtc	360
ccgccatttt atctccttcg tgaattttac gtttttgaac gatatagaca cgaactaaca	420
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cgataccgcc gccaccgtga ggtacacgga gagacgtatc acgaacttcg cgggcttttt	540
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ggtca	725

<210> 31  
 <211> 570  
 <212> DNA  
 <213> Enterococcus avium

<400> 31	
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gagccgccat tcccaagtgt aattccaaca cttgtccgat gttcatccga gatggcacac	180
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gcggtacacg aagagatgta tcacgaactt cagcagcctt ttcaccaaag atcgcatgca	480
acaaacgttc ttcagctgat aattctgtta cccctttagg agtgacttta ccaactaata	540
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<210> 32  
 <211> 732  
 <212> DNA  
 <213> Abiotrophia defectiva

<400> 32	
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gccggcttcc ttaactgttt ccagacatc ttcttcacta gcaccgtcaa agacagggtg	180

tgcaatcttg atgcccattt cgcgagcagc catccccaag tgtaactcta ggacttgccc	240
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tggtagaat ggcataatctt cttccggcat gataaggag acaaccctt tggtaccgtg	360
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gtggacaatc cgcggccgc cgtgtggcac acgcaaggaa gtatcacgta cttcacgcgc	540
cttctcaccg aagatagcat ggagcaagcg ttcttcogca gacaactcgg tcacaccttt	600
tggtgttacc ttaccaacta agatatcgcc gtcttttact tccgccccga tacagataat	660
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ttcttcaggt ca	732

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 <212> DNA  
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<400> 33	
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ttccgcaact gtagaccaa catcttcac agtagacca tgaataactg gtgtagctac	180
gtggattcca agttgttttag cagccatacc taagtgtagc tctaatactt gtccaatgtt	240
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gtaaggcata tcttcttctg gtaagatatt tgagataacc cctttgttac cgtgacgacc	360
ggccatttta tctcctacac gaattttacg tttttggacg ataaatacac gaacaagttc	420
atttacaccg ttaggtaatt cagcaccatc ttacgttta aagattttta catcagcaac	480
tactccatca gcaccgtgag gtacacgtaa tgaagtatca cgtacttctt tagatttagc	540
tccaaagata gcatataata atttttcttc tggagtttgt tcagttaatc ctttcgggtg	600
aactttacct actaaaatat ctccatcttt aacttcagcc ccaatacgaa tgattcctcg	660
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caggtca	727

<210> 34  
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 <212> DNA  
 <213> *Gemella haemolysans*

<400> 34	
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cttcogcaac ttagaccaa acatcttcac cagtagcacc atcgaatact ggtgtagcta	180



cgtggattcc aagttgttta gcagccatac ctaagtgtag ctctaatact tgtccaatgt	240
tcatacgaga tggaacccca agtgggttta acattacgtc aactgggtgta ccatctggta	300
ggtaaggcat atcttcttct ggtaagatat ttgagataac ccctttgtta ccgtgacgac	360
cggccatttt atctcctaca cgaattttac gtttttggac gataaatata cgaacaagtt	420
catttacacc gttaggtaat tcagcaccat cttcacgttt aaagatttta acatcagcaa	480
ctactccatc agcacccgtga ggtacacgta atgaagtatc acgtacttct ttagatttag	540
ctccaaagat agcatataat aatttttctt ctggagtttg ttcagttaat cctttcggtg	600
taactttacc tactaaaata tctccatctt taacttcagc cccaatacga atgattcctc	660
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ggtcca	726

<210> 35  
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 <212> DNA  
 <213> Granulicatella adjacens

<400> 35	
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ctgcaacagt tccccatacg tcttcatctt gcgcaccatc gaatactggg gttgcgatgt	180
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ctttaccaac taagatgtca ccatctttaa cttcggcacc gatacgaata attccgtctg	660
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<400> 36	
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18

<210> 51  
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25